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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,958	06/27/2001	John T. Chapman	CISCP221	6248
22434	7590	09/19/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			TRAN, PHUC H	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2666	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,958

Applicant(s)

CHAPMAN, JOHN T.

Examiner

PHUC H. TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/14/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

* Note: the claim limitations that employ phrases of the type “adapted to” are typical of claim limitations, which may not distinguish over the prior art. The limitations after the “adapted to” performing a function is not a (consider) positive limitation but only requires the ability to so perform.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Liva et al. (US 2002/0136203 A1).

- With respect to claims 1, and 23, Liva teaches a packet fiber node (Fig. 3A) for use in an access network (Fig. 2A), the access network including a Head End (e.g. the headend in Fig.

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2A) and a plurality of nodes (e.g. nodes in Fig. 2A), the packet fiber node comprising: at least one processor (3B in Fig. 3A); memory (Fig. 3A);

a first interface for communicating with the Head End (e.g. O/E in Fig. 3A); and

a second interface for communicating with at least a portion of the plurality of network nodes (e.g. 3D in Fig. 3A);

the packet fiber node being configured or desired to communicate with the Head End using baseband optical signals (Fig. 4D and Fig. 14).

- With respect to claims 2, 11, and 24, Liva also teaches wherein the packet fiber node is not adapted to communicate with the Head End using frequency modulated optical signals (e.g. legacy analog fiber in Fig. 3A).

- With respect to claims 3, 12, 22, & b25, Liva further teaches wherein the packet fiber node is configured or designed to communicate with the Head End using only baseband optical signals (page 2, paragraph 0019).

- With respect to claims 4, 13, & 26, Liva teaches wherein the packet fiber node is further configured or desired to communicate with at least a portion of the cable modems using modulated electrical signals generated in accordance with a standardized DOCSIS protocol (e.g. mini CMTS in Fig. 3A).

- With respect to claims 5, 14, & 27, Liva teaches wherein the access network corresponds to a cable network implemented in accordance with a standardized DOCSIS protocol (page 2, paragraph 0017);

the packet fiber node being further configured or designed to perform functions relating to DOCSIS MAC scheduling operations (page 5, paragraph 75).

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- With respect to claims 6, 15, & 28, Liva teaches wherein the access network corresponds to a cable network (page 1, paragraph 5); the packet fiber node being further configured or designed to handle layer 1 (page 6, paragraph 86) and layer 2 functionality (Fig. 5).

- With respect to claims 7, 16, and 19-21, Liva also teaches wherein the access network corresponds to a cable network (page 1, paragraph 5), and wherein the network nodes correspond to cable modems (page 1, paragraph 9), the cable network including a first RF fiber node () adapted to communicate with the Head End using frequency modulated optical signals, the first RF fiber node further being adapted to service a first group of cable modems and a second group of cable modems (page 1, paragraph 6; page 5, paragraph 75, 76);

the cable network further including a first packet fiber node and a second packet fiber node, each packet fiber node being adapted to communicate with the Head End using baseband optical signals (Fig. 4D and Fig. 14);

the first packet fiber node being adapted to service the first group of cable modems; the second packet fiber node being adapted to service the second group of cable modems (e.g. groups in Fig. 2).

- With respect to claims 8-9, 17-18, and 29-30, Liva discloses the packet fiber node being further configured or designed to receive IP packets from a portion of the cable modems (Fig. 6, page 3, paragraph 28); and wherein the packet fiber node is further configured or designed to transmit the received IP packets to the Head End using a tunneling protocol (page 3, paragraph 25).

- With respect to claim 10, Liva teaches a packet fiber node for use in an access network, the access network including a Head End and a plurality of nodes, the packet fiber node comprising: a diplexor (Fig. 3D); at least one interface (e.g. O/E in Fig. 3A); and a distributed cable modem termination system (DCMTS), the DCMTS being configured to communicate with the Head End using baseband optical signals (e.g. mini CMTS in Fig. 3A); wherein the packet fiber node is adapted to communicate with the Head End using frequency modulated optical signals (Fig. 4D and Fig. 14).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eng (U.S. Patent No. 5963557) discloses high capacity reservation multiple access network with multiple shared unidirectional paths.

Nazarathy et al. (U.S. Patent No. 6490727 B1) discloses distributed termination system for two-way hybrid networks.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
9/18/05



DANG TON
PRIMARY EXAMINER